

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International publication date  
31 July 2003 (31.07.2003)

PCT

21 JUL 2004  
(10) International publication number  
WO 03/062625 A1

(51) International patent classification<sup>7</sup>:  
F28F 27/02

F02M 25/07,

(72) Inventors; and

(75) Inventors/Applicants (US only): ROSIN, Jürgen [DE/DE]; Libanonstrasse 90, 70186 Stuttgart (DE). BRONISCHEWSKI, Bernhard [DE/DE]; Am Rheintor 7, 47829 Krefeld (DE). FASSENDER, Ulrich [DE/DE]; Zur Mühle 4, 41189 Mönchengladbach (DE). HEINZE, Manfred [DE/DE]; Lange Strasse 146, 41751 Viersen (DE). KRIEN, Andreas [DE/DE]; Agathastrasse 39, 50181 Bedburg (DE). WALLRAVEN, Markus [DE/DE]; Jülicher Landstrasse 97, 41464 Neuss (DE).

(21) International application number: PCT/EP03/00606

(22) International filing date: 22 January 2003 (22.01.2003)

(25) Language of filing: German

(26) Language of publication: German

(30) Data relating to the priority:  
102 03 003.0 26 January 2002 (26.01.2002) DE

(74) Attorney: HEUMANN, Christian; Furtwänglerstrasse 91, 70195 Stuttgart (DE).

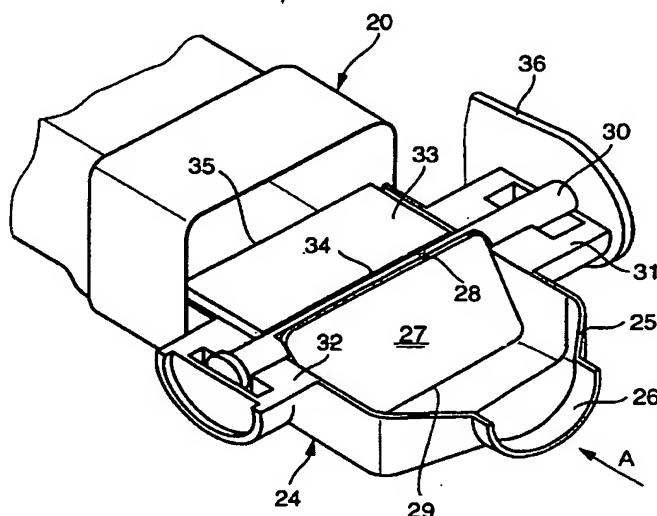
(71) Applicant (for all designated States except US): BEHR GMBH & CO. KG [DE/DE]; Mauserstrasse 3, 70469 Stuttgart (DE).

[continued on next page]

As printed

(54) Title: EXHAUST GAS HEAT EXCHANGER

(54) Bezeichnung: ABGASWÄRMEÜBERTRAGER



(57) Abstract: The invention relates to an exhaust gas heat exchanger (2) comprising a bundle of pipes (21) consisting of exhaust gas pipes (22) and a bypass channel (23) in a common housing. The pipe bundle is arranged in a first chamber that is crossflowed by a liquid coolant and the bypass channel is arranged in a second, separate chamber. The pipe bundle and the bypass channel lead into a common exhaust gas inlet area and a common exhaust gas outlet area in which an exhaust gas valve actuated by a servo-drive is arranged, said valve guiding the exhaust gas flow through the pipe bundle or the bypass channel. According to the invention, the exhaust gas valve has a movable closing organ that is resistant to bending, said organ being preferably embodied as a pivoting semi-flap (27) that is fixed with a longitudinal side (28) to a drive shaft (30) that is arranged crosswise relative to the exhaust gas flow (A).

[continued on next page]

WO 03/062625 A1